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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,774	12/12/2003	Hidetoshi Okawa	1226-104	8752

23117 7590 09/08/2005

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EXAMINER

MULLIS, JEFFREY C

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/733,774

Applicant(s)

OKAWA, HIDETOSHI

Examiner

Jeffrey C. Mullis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9 and 13-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

The affidavit filed on 7-20-05 under 37 CFR 1.131 is sufficient to overcome the Kikutani, WO'68 reference.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 18, 19 and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Aoshima et al. (US 4,668,761).

Aoshima discloses a process in which a tube having a diameter of 4mm outer and 1mm inner is made by extrusion and stretching at temperatures up to the softening point of an "acetal copolymer" made by Polyplastic having the tradename DURACON M25-04. See Examples 1-12 in column 15. Note that the polyacetal copolymers have applicants comonomer units "1" at column 11, lines 9-14 including branching units such as

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pentaerythritol derived units. Note that the MFI is 1-20 at column 11, lines 16-18 and 90-99% of oxymethylene recurring units are present at column 11, lines 20-25.

It appears that the above material DURACON M25-04 is produced by Applicants Company. If applicants are aware of any publicly available information regarding the specifics of this material (or any other trade named POM copolymer) such as MI or molecular weight or specific composition they should submit such information in keeping with their duty of disclosure.

Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoshima, cited above.

Aoshima does not disclose that the materials of the examples have all of applicant's characteristics and comonomer content, although patentee's specification does disclose such. Hence to use applicants specific POM in the process of forming a product in Aoshimas' process would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention, in the expectation of adequate result absent any showing of surprising or unexpected results.

The terminal disclaimer filed on 7-20-05 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US patent 6,818,294 and serial no. 10/308040 has been reviewed and is accepted. The terminal disclaimer has been recorded.

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Applicant's arguments filed 7-20-05 have been fully considered but they are not persuasive. Applicants argue that "normal pressure" means atmospheric pressure but the examiner can find nothing in applicants specification indicating such a definition and is unaware of any definition in the art indicating that non atmospheric pressure is not normal. With re to heat fixing, there is nothing in applicants specification or claims indicating that by "heat fixing" does not embrace the heating under tension of patentees. It is noted that applicants "heat fixing" appears to be defined at paragraph 23 of the specification where the term appears to be defined as a treatment "where a molecular state is fixed in a heated condition". There is nothing in the reference to indicate that the molecular state of Aoshimas product varies after heat stretching.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication should be directed to Jeffrey C. Mullis at telephone number 571 272 1075.

Jeffrey C. Mullis  
J Mullis  
Art Unit 1711

JCM

9-05-05

Jeffrey Mullis  
Primary Examiner  
Art Unit 1711

A handwritten signature in black ink, appearing to be 'JCM', located below the printed name and title of Jeffrey Mullis.